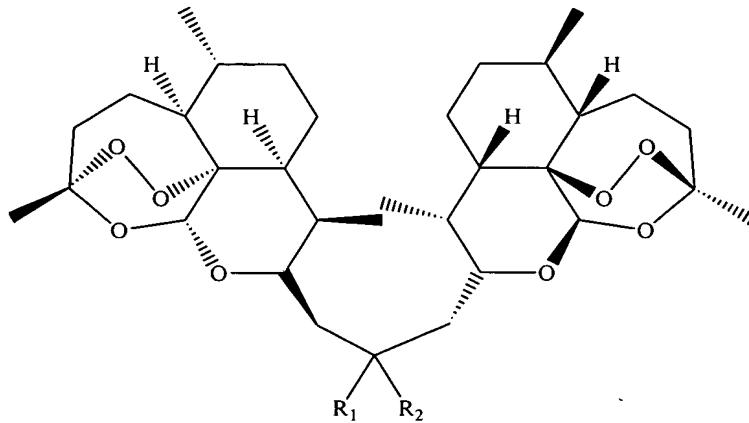


The listing of claims which follows replaces all previous versions.

1. (Original) A compound including resolved enantiomers, diasteriomers, solvates and pharmaceutical acceptable salts thereof, said compound having the formula:



wherein if R_1 is hydrogen or $-OH$ then R_2 is AX , and if R_2 is hydrogen or $-OH$ then R_1 is AX , and A may be absent or A may be any alkyl or aryl group where X is hydrogen, a phosphate group, a phosphonic acid derivative group, an alcohol group, a carboxylic acid group, an ether group, an ester group, a nitrile group, a sulfone group, a sulfide group, an amino acid derivative group, an amine group, and amide group, an aldehyde group, or an aromatic group.

2. (Original) The compound of claim 1, wherein said alcohol group is represented by $-R^3OH$, wherein R^3 is a straight chained or branched alkyl group having 1 to 5 carbon atoms.

3. (Original) The compound of claim 1, wherein said carboxylic acid group comprises $-R^4COOH$ wherein R^4 is at least one saturated or unsaturated alkyl group, an aryl group an ester group, an ether group or a combination thereof.

4. (Original) The compound of claim 3, wherein R^4 is an ester group represented by $-R^5COO-$, wherein R^5 is bonded to the carboxylic acid group and has 0 to 5 carbon atoms.

5. (Original) The compound of claim 3, wherein R⁴ is an ether group represented by R⁶-O-R⁷ wherein R⁶ and R⁷ are, independently, an alkyl or allyl group having 0 to 5 carbon atoms.

6. (Original) The compound of claim 1, wherein said aromatic group comprises Ar-(R⁸)_m, wherein Ar represents a benzene ring, and m is 1 or 2.

7. (Original) The compound of claim 6, wherein R⁸ is -CH=CH₂, or -COOH.

8. (Original) The compound of claim 1, wherein the ester group is represented by -CR⁹, where R⁹ is an ester of nicotinic acid, an ester of isonicotinic acid, or the ester group is represented by -CO(C=O)R^{9a}, where R^{9a} is Ph(CY₃)_o, where o is 1 or 2, and Y may be, independently, H, F, Cl, Br, or I, or where R^{9a} is a substituted heterocyclohexane compound.

9. (Original) The compound of claim 1, wherein the phosphonic acid derivative group is represented by -CO-P(R¹⁰)(O)OH, where R¹⁰ is an alkyl group having 0 to 5 carbon atoms.

10. The compound of claim 1, wherein the phosphate group is -COP(O)(OR¹¹)₂, where R¹¹ is an alkyl group having 0 to 5 carbon atoms, or a phenyl group.

11. (Original) The compound of claim 1, wherein the nitrile group is R¹²CN, where R¹² is an alkyl group having 0 to 5 carbon atoms.

12. (Original) The compound of claim 1, wherein the sulfone group is -CS(=O)₂R¹³, wherein R¹³ is -N(CH₃)₂, -OR¹⁴, or -Ph-COOR¹⁴, where R¹⁴ is H, CH₃, or -CH(CH₃)₂.

13. (Original) The compound of claim 1, wherein the sulfide group is -CSR¹⁵, where R¹⁵ is pyridine or -Ph-COOR¹⁶, where R¹⁶ is H or CH₃.

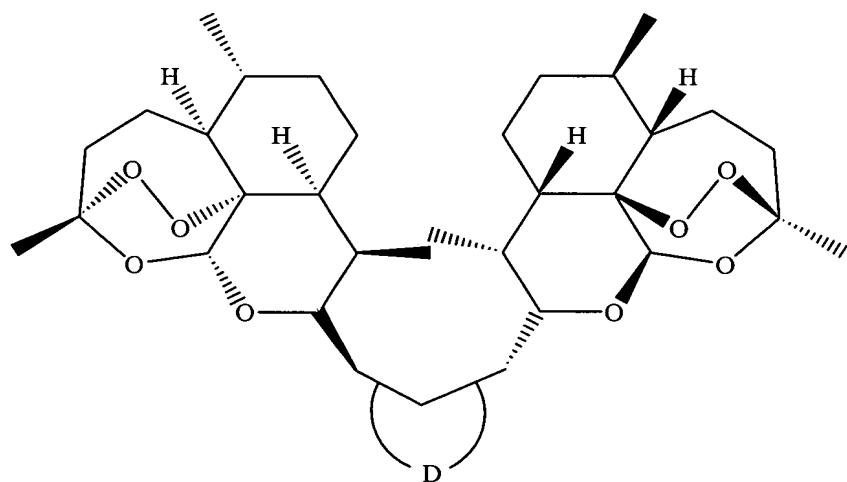
14. (Original) The compound of claim 1, wherein the amino acid derivative group is -COC(=O)CHR²¹N(R¹⁷)₂, where each R¹⁷ group is, independently, H or CH₃ and R²¹ is hydrogen or any other substituent.

15. (Original) The compound of claim 1, wherein the amine group is – CN(R¹⁸)₂, where each R¹⁸ group is, independently, H, an alkyl group, or a phenyl group.

16. (Original) The compound of claim 1, wherein the ether group is – C–O–CR¹⁹, where R¹⁹ is a substituted pyridine.

17. (Original) The compound of claim 1, wherein the amide group is – (C=O)N(R²⁰)₂, or –CH₂(C=O)N(R²⁰)₂ where each R²⁰ is, independently, H or – CH₂CH₂N(CH₃)₂.

18. (Original) A compound including resolved enantiomers, diasteriomers, solvates and pharmaceutical acceptable salts thereof, said compound having the formula:



where D forms a heterocyclic ring having 3 to 5 atoms.

19. (Original) The compound of claim 18, wherein the heterocyclic ring is a 3-membered ring and one of the atoms in the ring is oxygen.

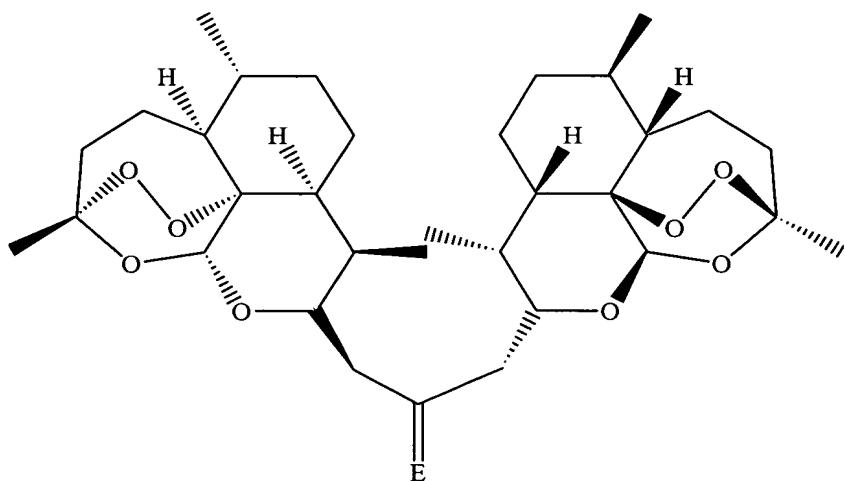
20. (Original) The compound of claim 18, wherein the heterocyclic ring is a 5-membered ring and two of the atoms in the ring are oxygen.

21. (Original) The compound of claim 20, wherein the heterocyclic ring is substituted with an oxygen atom.

22. (Original) The compound of claim 21, wherein another atom in the 5-membered ring is a sulfur or a phosphorous atom.

23. (Original) The compound of claim 22, wherein the 5-membered ring is substituted with 1 or 2 oxygen atoms bonded to the sulfur atom.

24. (Original) A compound including resolved enantiomers, diasteriomers, solvates and pharmaceutical acceptable salts thereof, said compound having the formula:



where E is H, O, NR, CH₂ or S wherein R may be hydrogen, alkyl, aryl or any other substituent.

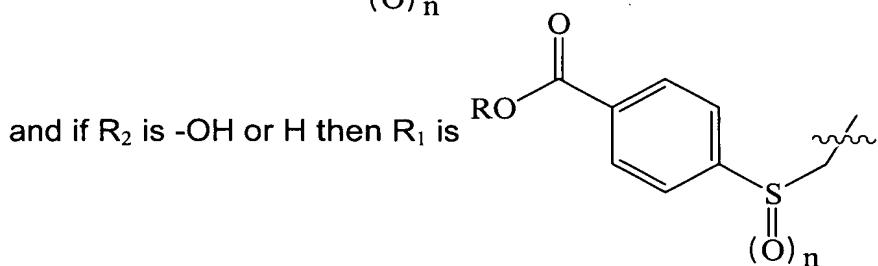
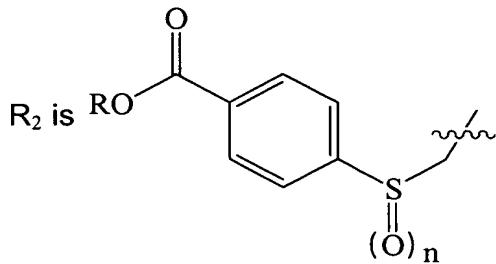
25. (Original) The compound of claim 1 wherein if R₁ is H or -OH then R₂ is and if R₂ is OH or H then R₁ is

26. The compound of claim 1, wherein if R₁ is H or -OH then

R₂ is and if R₂ is OH or H then

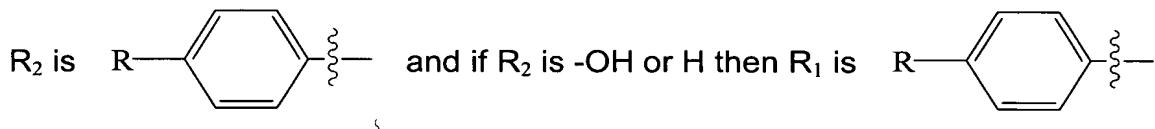
R₁ is

27. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



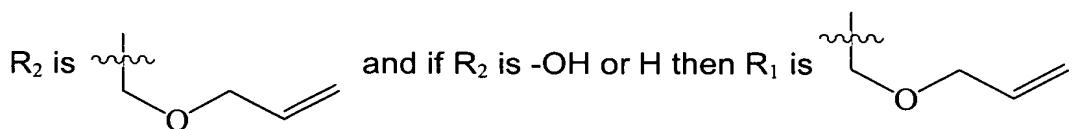
wherein R is hydrogen or a methyl group when n is 0 or 2.

28. (Original) The compound of claim 1, wherein if R_1 is H or -OH then

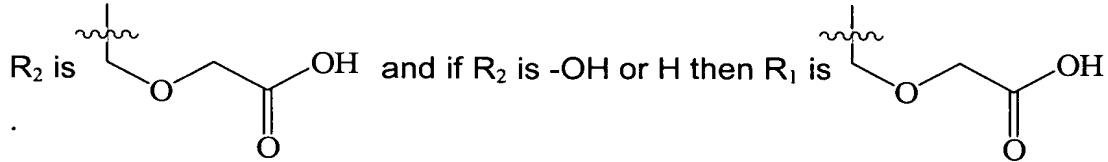


wherein R may be $\text{CH}_2=\text{CH}$ or COOH .

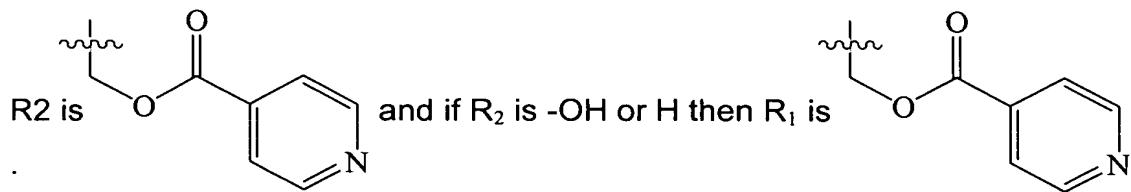
29. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



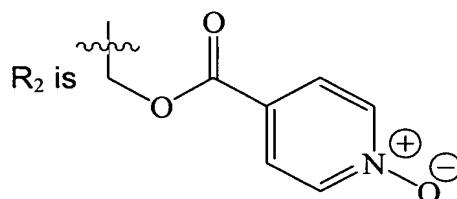
30. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



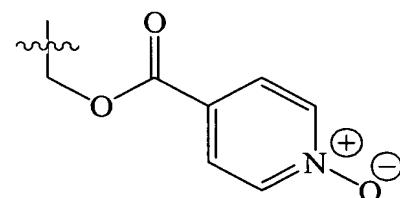
31. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



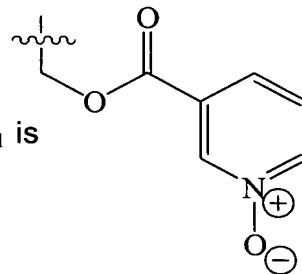
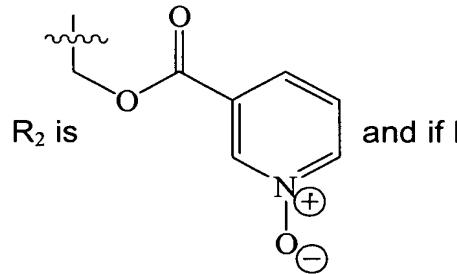
32. (Original) The compound of claim 1, wherein if R₁ is H or -OH then



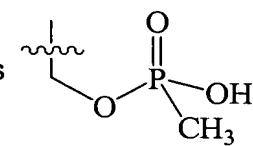
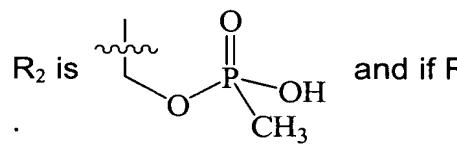
and if R₂ is -OH or H then R₁ is



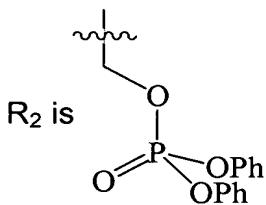
33. (Original) The compound of claim 1, wherein if R₁ is H or -OH then



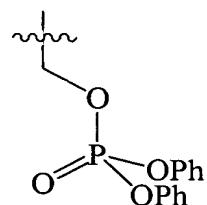
34. (Original) The compound of claim 1, wherein if R₁ is H or -OH then



35. (Original) The compound of claim 1, wherein if R_1 is H or -OH then

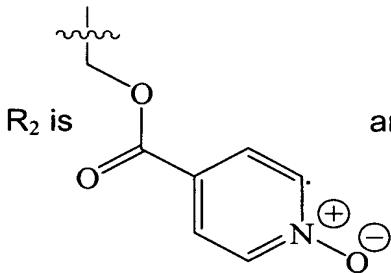


and if R_2 is -OH or H then R_1 is

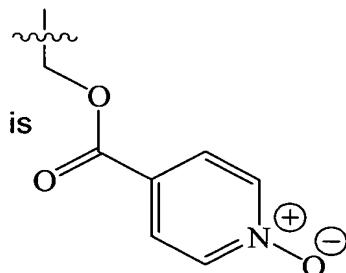


36. (Currently amended) The compound of claim 1, wherein if R_1 is H then R_2 is -OH.

37. The compound of claim 1, wherein if R_1 is H or -OH then

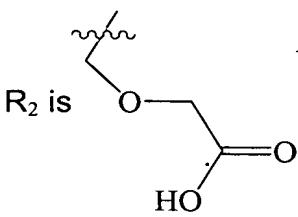


and if R_2 is -OH or H then R_1 is

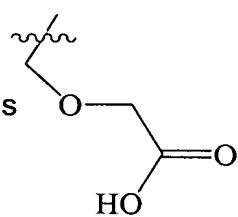


38. (Original) The compound of claim 1, wherein if R_1 is H then R_2 is carboxylic acid.

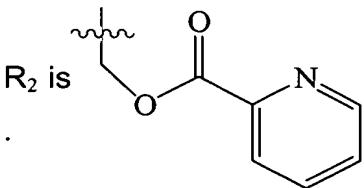
39. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



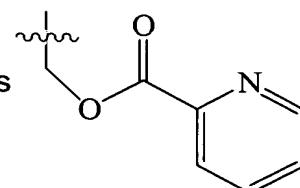
and if R_2 is -OH or H then R_1 is



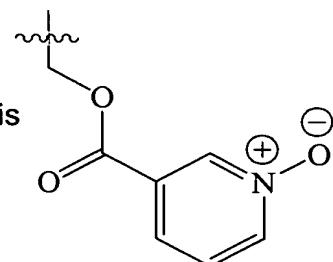
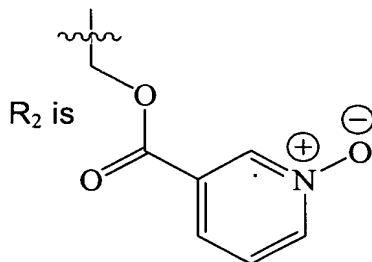
40. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



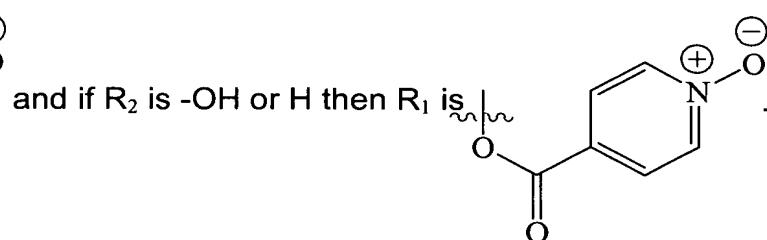
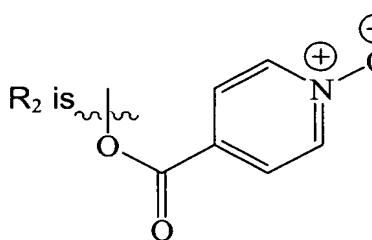
and if R_2 is -OH or H then R_1 is



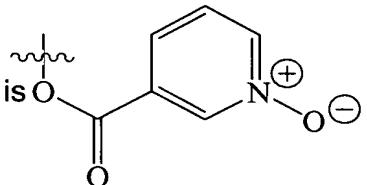
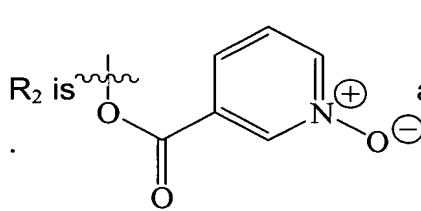
41. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



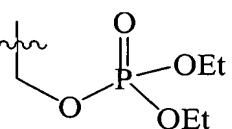
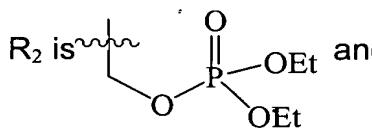
42. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



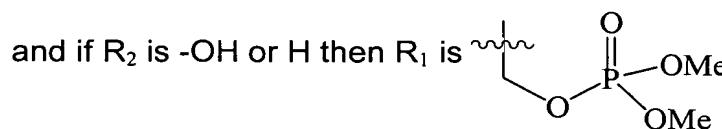
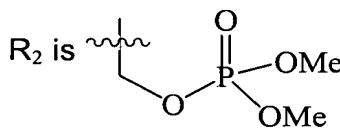
43. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



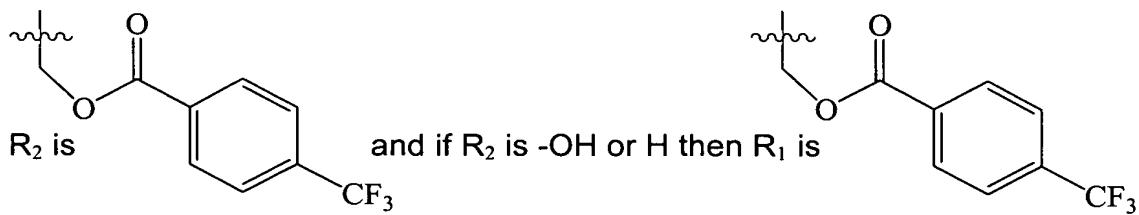
44. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



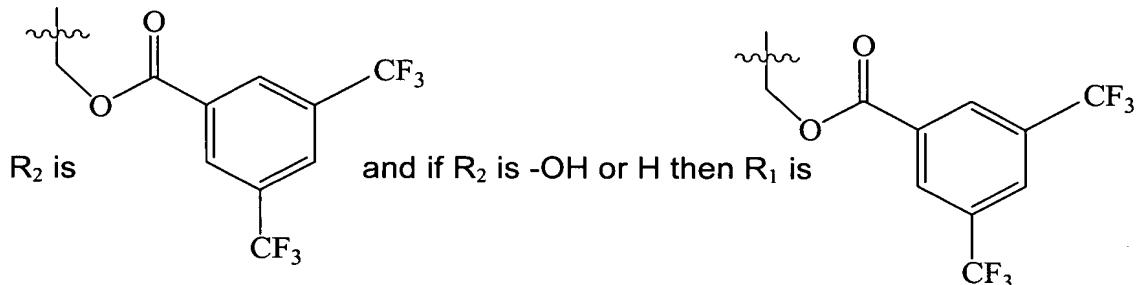
45. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



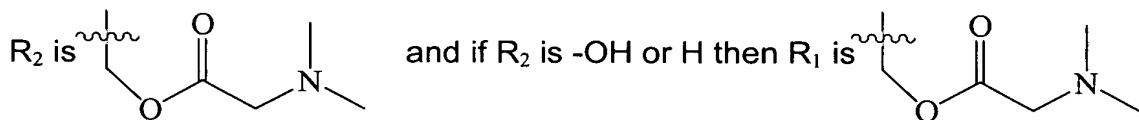
46. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



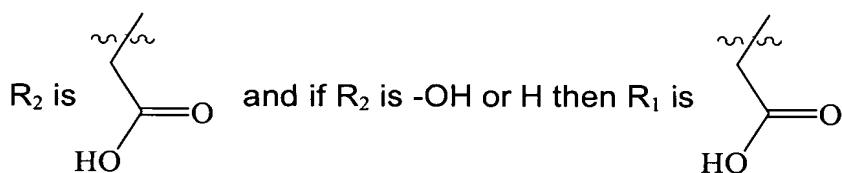
47. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



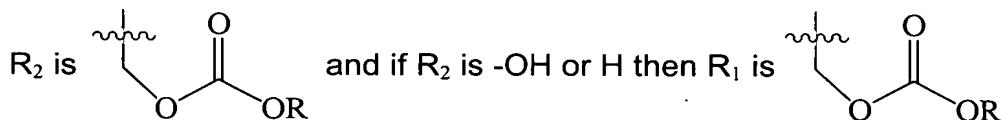
48. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



49. (Original) The compound of claim 1, wherein if R_1 is H or -OH then

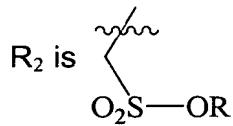


50. (Original) The compound of claim 1, wherein if R_1 is H or -OH then

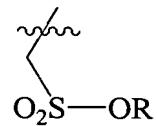


51. (Original) The compound of claim 50 wherein R is a methyl or ethyl group.

52. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



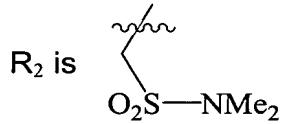
and if R_2 is -OH or H then R_1 is



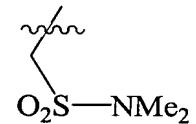
53. (Original) The compound of claim 52 wherein R is a methyl group.

54. (Original) The compound of claim 52 wherein R is an iso-propyl group.

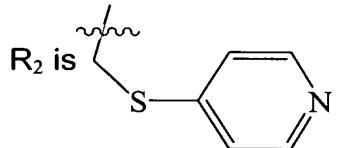
55. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



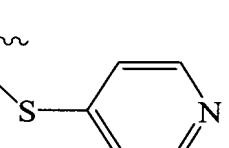
and if R_2 is -OH or H then R_1 is



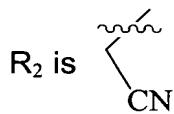
56. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



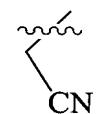
and if R_2 is -OH or H then R_1 is



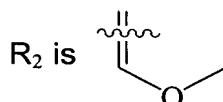
57. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



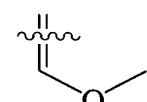
and if R_2 is -OH or H then R_1 is



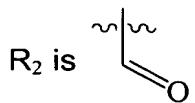
58. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



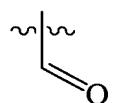
and if R_2 is -OH or H then R_1 is



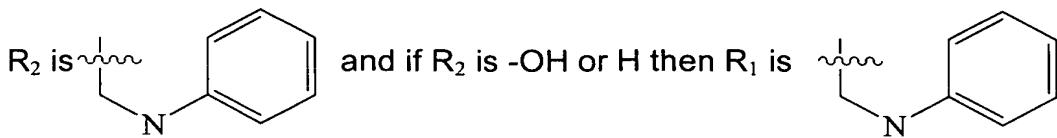
59. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



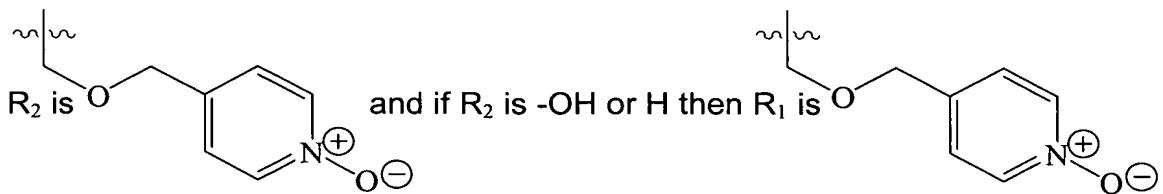
and if R_2 is -OH or H then R_1 is



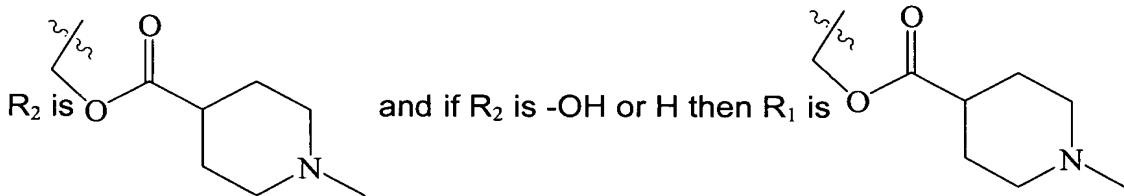
60. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



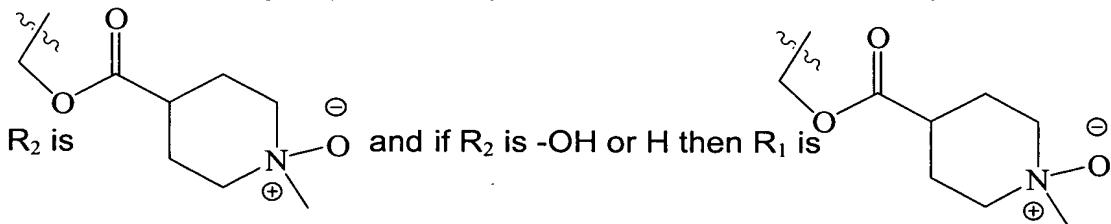
61. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



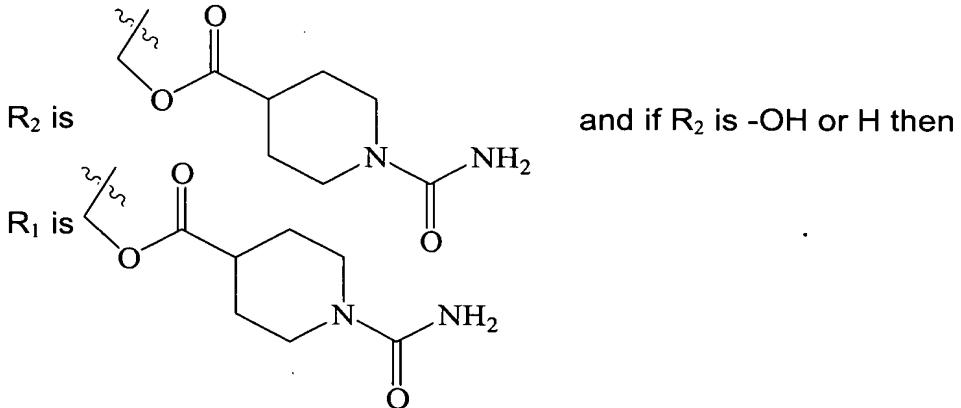
62. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



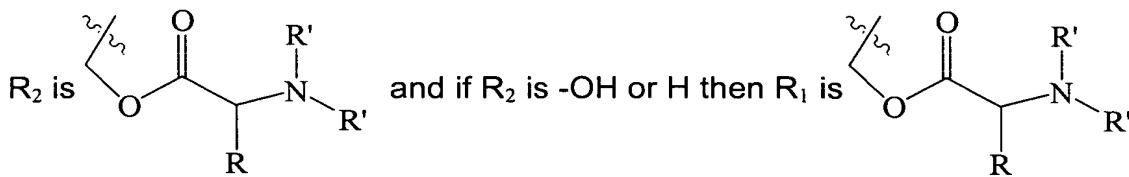
63. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



64. (Original) The compound of claim 1, wherein if R_1 is H or -OH then

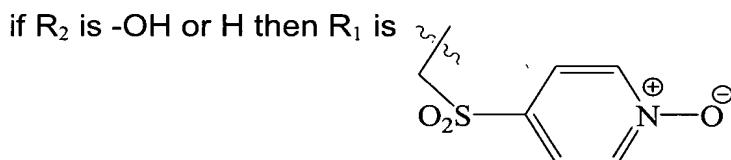
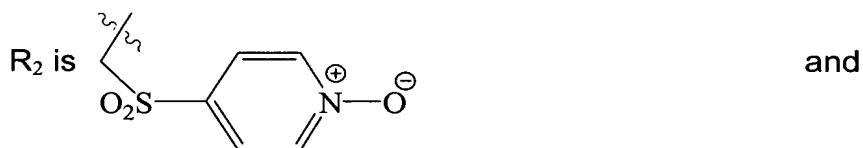


65. (Original) The compound of claim 1, wherein if R_1 is H or -OH then

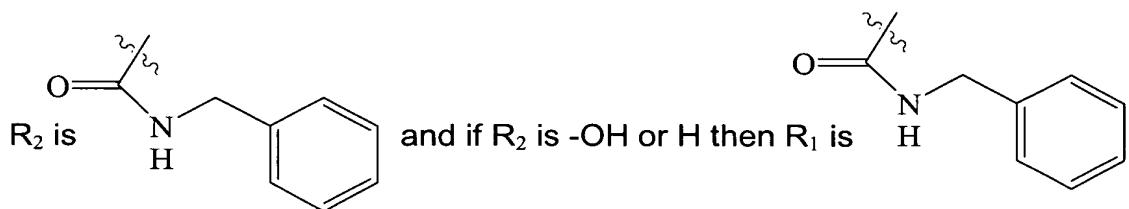


66. (Original) The compound of claim 66 wherein each R' and R independently can be any amino acid of all possible stereochemistries and with any degree and choice of protecting group.

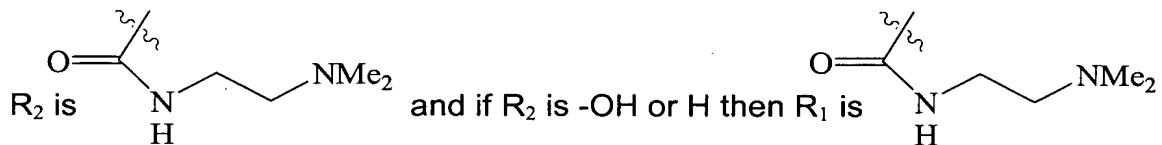
67. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



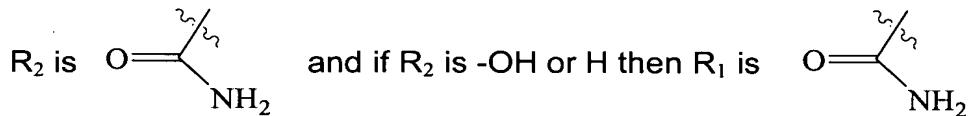
68. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



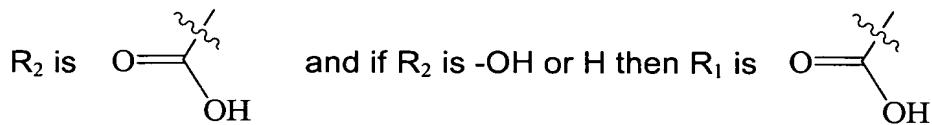
69. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



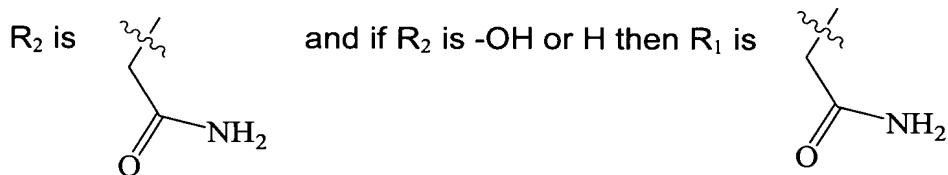
70. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



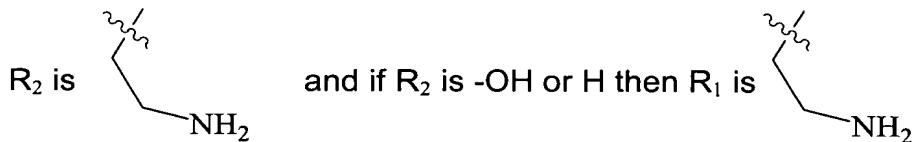
71. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



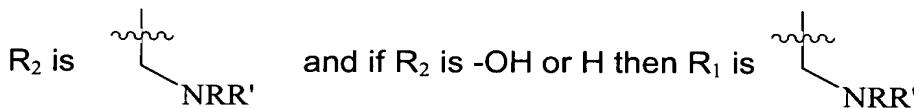
72. (Original) The compound of claim 1, wherein if R_1 is H or -OH then



73. (Original) The compound of claim 1, wherein if R_1 is H or -OH then

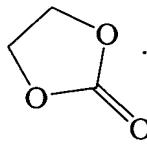


74. (Original) The compound of claim 1, wherein if R_1 is H or -OH then

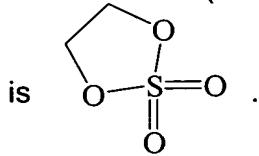


75. (Original) The compound of claim 74, wherein R and R' are independently of each other hydrogen, alkyl, aryl, or allyl.

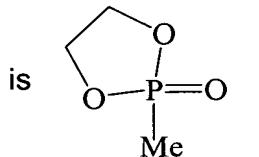
76. (Original) The compound of claim 19 wherein said heterocyclic ring is 

77. (Original) The compound of claim 21 wherein said heterocyclic ring is 

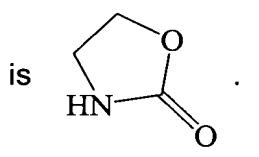
78. (Original) The compound of claim 22 wherein said heterocyclic ring



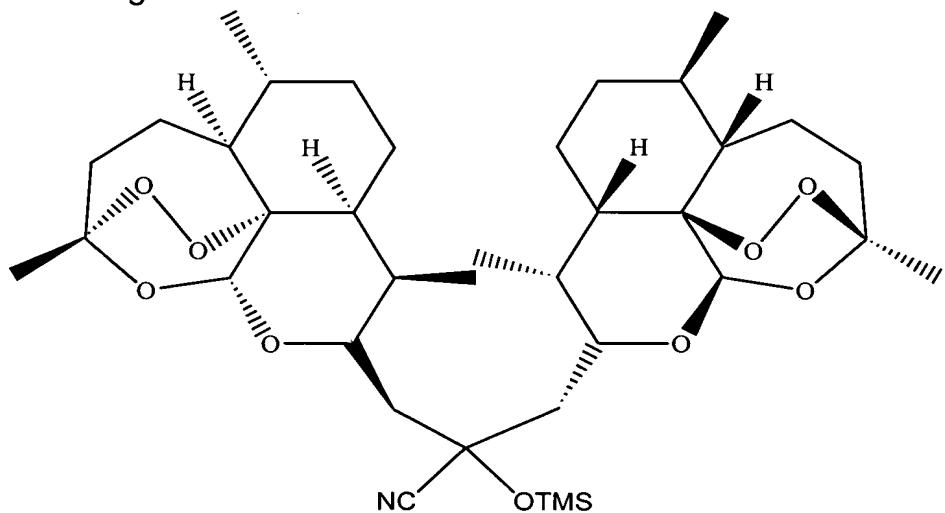
79. (Original) The compound of claim 21 wherein said heterocyclic ring



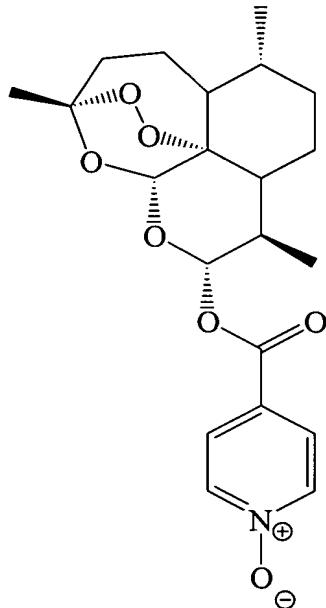
80. (Original) The compound of claim 22 wherein said heterocyclic ring



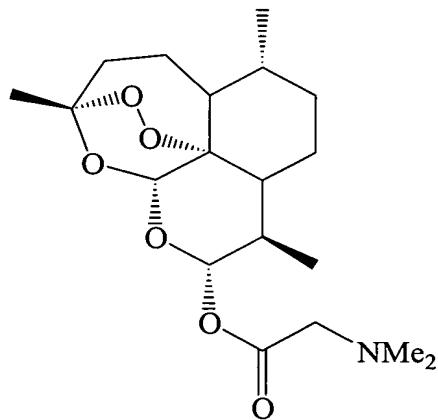
81. (Original) A compound including resolved enantiomers, diasteriomers, solvates and pharmaceutical acceptable salts thereof, said compound having the formula:



82. (Original) A compound including resolved enantiomers, diasteriomers, solvates and pharmaceutical acceptable salts thereof, said compound having the formula:



83. (Original) A compound including resolved enantiomers, diasteriomers, solvates and pharmaceutical acceptable salts thereof, said compound having the formula:



84. (Currently amended) A method of treating cancer, which comprises administering to a patient suffering from said cancer [[a]] the compound of claim 1. or combination of compounds of claims 1—83.

85. (Original) A method according to claim 84 wherein said cancer is selected from the group of cancers consisting of leukemia, non-small cell lung cancer, colon cancer, central nervous system cancer, melanoma cancer, ovarian cancer, renal cancer, prostate cancer, and breast cancer.

86. (Currently amended) A method for treating malaria comprising ~~administering~~ administering an effective amount of [[a]] the compound or ~~combination of compounds of claims 1-83.~~ of claim 1.